

## **Patent Abstracts of Japan**

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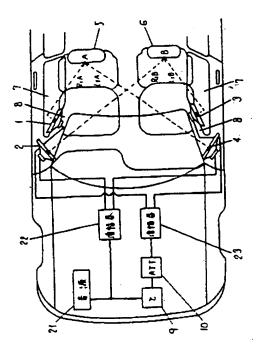
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TITLE

: ON-VEHICLE SPEAKER EQUIPMENT



ABSTRACT :

PURPOSE: To make the time response and the sound pressure level from left and right speakers equal to each other simultaneously and to realize a sound field with a natural stereophonic sense in both a driver's seat and a driver's assistant seat in a cabin by providing two sound sources one of which radiates sound only to the driver's seat and the other of which radiates sound only to the driver's assistant seat having a sharp directivity to left and right sides of the cabin respectively.

CONSTITUTION: Speakers 1, 3 are installed in a way that they radiate sound from left/right front pillars 8 to a side window 7 and its primary reflected sound reaches listening points A, B with a limit and speakers 2,4 are installed such that they radiate sound from a comer at front end of the side window 7 to the listening points A, B with a limit respectively. Moreover, a deviation in the time response due to a path difference between left right paths R<sub>1</sub>A, L<sub>2</sub>A at the listening point A of the driver's seat 5 and left right paths R<sub>2</sub>B, L<sub>1</sub>B at the listening point B of the driver's assistant seat 6 is compensated by an electric delay means 9 and a sound pressure level difference due to distance attenuation is corrected by an attenuator 10 respectively.

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